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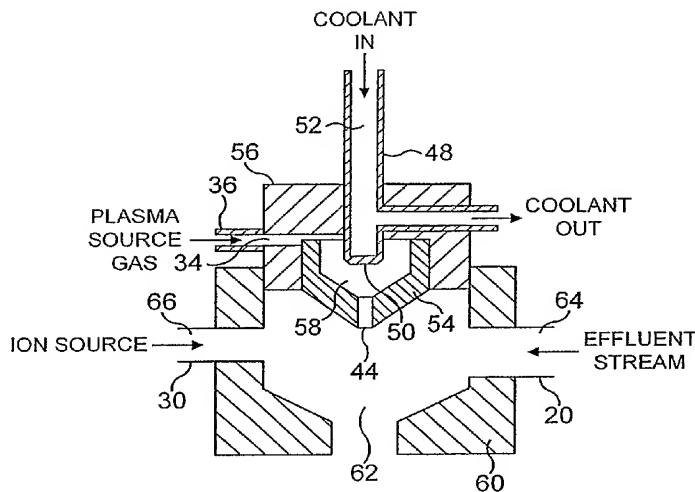
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(54) Title: METHOD AND APPARATUS FOR TREATING A FLUOROCOMPOND-CONTAINING GAS STREAM



(57) Abstract: A method for treating a perfluorocompound-containing gas stream, for example an effluent fluid stream from a semiconductor manufacturing process tool. In one embodiment, a plasma torch is used to generate a plasma from an ionisable gas, such as nitrogen or argon. This plasma is injected into a reaction chamber, which receives both a stream of water vapour and an effluent fluid stream. The ionised stream dissociates the water vapour into heated H<sup>+</sup> and OH<sup>-</sup> ions for reaction with the perfluorocompound. An apparatus for treating a perfluorocompound containing gas stream comprises a means for generating a plasma from a source gas, a means for injecting the plasma into the reaction chamber, a means for conveying the gas stream to the reaction chamber, and a means for conveying a source of H<sup>+</sup> and OH<sup>-</sup> ions to the plasma.

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